

292 pag

OSFOI 1365 ~~Wham-O Mfg.~~
Off(6a release), chron, spec.
3285

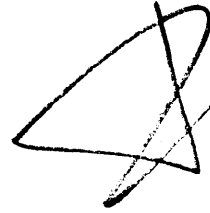


U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

February 24, 1997

~~CERTIFIED MAIL~~

Ms. Eileen P. Raab
Fisher-Price, Inc.
636 Girard Avenue
East Aurora, NY 14052



RE: FOIA Request S-604120; Recall of "Fun Fountain" water toy manufactured by Wham-O Manufacturing Company

Dear Ms. Raab:

Thank you for your Freedom of Information Act (FOIA) request seeking information from the Commission. The records from the Commission files responsive to your request have been processed and copies of the records are enclosed.

The enclosed records represent file information generated by the Commission for regulatory or enforcement purposes. These records are in file ID 800016 and are identified as Establishment Inspection Reports, Laboratory Summaries, Hazard Assessment memoranda, and other correspondence, notes and documents. The Commission has established management systems under which supervisors are responsible for reviewing the work of their employees or contractors. The file information materials are final and have been prepared and accepted by the Commission's staff under such review systems. The Commission believes that it has taken reasonable steps to assure the accuracy of the information. Please note that the Commission's staff, not the Commissioners themselves, made the preliminary determination that this product presented a substantial risk of injury to the public as defined by the Consumer Product Safety Act.

Processing this request, performing the file searches and preparing the information, cost the Commission \$60.00. In this instance, we have waived all of the

JD
80-16 1 Del Kramer, City.

Whamco HyCo.
Sun fountain fire -
CA accepted.

After CAP, 2 complaints given to firm.
ETR attached, shows 2 more.
PSA request to Mr. Esch.
Response 7-29-81.

12-81 - 2 more TDI -
mailed to Co.

See Mr. K 82 ltr from Saudi.
Call indicated response by
4-9-82.

Believe modification still OK.
How many units were corrected?

4-14-82 Telephone call from
Ken Malard. Indicated that
Response which was expected
on 4-9-82, was being sent out
today. Should be hand
delivered tomorrow.

QDR. 4:45 PM.
4/14/81

A
8

MEMO RECORD		AVOID ERRORS PUT IT IN WRITING		DATE	
FROM:				OFFICE	
TO:				DIVISION	
SUBJECT:					
SUMMARY					
SIGNATURE				DOCUMENT NUMBER	

RESTRICTED

UNITED STATES GOVERNMENT

U.S. CONSUMER PRODUCT
SAFETY COMMISSION
WASHINGTON, D.C. 20207

Memorandum

TO : John Rogers, CACA
THRU: Nick Marchica, EX-P
THRU: Walter R. Hobby, Acting AED, EC
FROM : Terrance R. Karels, ECCS

DATE: June 2, 1982

SUBJECT: Wham-O Fun Fountains--PSA #475

This is in response to your memo of April 24, 1982, in which you requested that Economic Analysis estimate the number of Wham-O Fun Fountains which could be expected to be in consumers' possession.

From the available data, it is not possible to determine annual sales of these fun fountains; the firm has supplied information on total sales over the period 1977-1979. As you suggested, Economics has allocated annual sales as follows:

Total Sales, 1977-79:	508,970 units
minus shipments of	
Retrofit Kits:	99,518
Total not Retrofitted	409,452 units
<u>Allocated Sales</u>	
1977	136,484
1978	136,484
1979	136,484

Although information is not available relative to the estimated useful life of this product, after discussions with Compliance, it was agreed that Economics would supply a range of estimates based on projected product lives of 1 to 3 seasons. Through the use of the CPSFORE product forecasting model, it is possible to estimate the probable number of Wham-O Fun Fountains still in service at any given time. The model requires input of basic product information, such as the number of units sold per period, the expected useful life of the product, and parameters for statistical distribution which describe the rate over time at which these units are removed from service. The accuracy of the resultant estimate is highly dependent on the accuracy of the information put in. Thus, the following data should be considered a rough estimation of the number of the fun fountains still available for consumer use, at each average product life.

78. JUN 11 4 59 PM '82

46

10

<u>Average Product Life (SD)</u>	<u>In Consumer Hands (Thousands)</u>	
	<u>End of 1981</u>	<u>End of 1982</u>
1 Year (.5)	3	—
1.5 Years ⁽¹⁾ (.75)	34	2
2 Years (1.0)	93	24
2.5 Years ⁽²⁾ (1.25)	153	68

(1) Since the use of this product is seasonal, estimate would account for 2 seasons of use.

(2) 3 seasons of use.

11

Memorandum

TO : File
Through: Assoc. Exec. Director for Compliance & Enforcement
Through: Catherine C. Cook, Director, CEPD
FROM : Through: Frank Pipkin, Chief, HCB/CEPD
Through: Melvin I. Kramer, Staff Attorney, CEPD
Sandra C. Shimasaki, Project Officer, HCB/CEPD
SUBJECT: ID 80-16 Wham-O Mfg. Co., San Gabriel, California
Fun Fountain Water Toys

DATE: APR 3 1980

Action

Accept corrective action plan and monitor.

Summary

On November 14, 1979, CEPD opened an ID file in the name of Wham-O Mfg. Co. of San Gabriel, California, based on our preliminary determination that certain Fun Fountain water toys it manufactured contain a defect which presents a substantial product hazard. The staff believes the toy is designed such that it invites children to look into the nozzle and that the force with which the water can come through the nozzle is such that it may cause eye injury upon impact. Other injuries may occur as a result of sitting on the stream of water shooting out of the toy.

At CEPD's urging the company has initiated a field modification program to correct units in consumers hands. It has also implemented changes to its future production of the toy. CEPD finds Wham-O's corrective action plan to be adequate.

Product

1. Description: The Fun Fountain is a water toy consisting of a clown head and hat. The clown head portion is attached to the garden hose. When water is turned on, a stream of water shoots out of a nozzle in the top of the clown head. The clown hat is held suspended in the air by the force from the stream of water and can rise up to 15 feet depending on the water supply pressure. The toy can be used with or without the hat.

2. Brand Name: Wham-O Fun Fountain.

10
12

3. Model Number: Stock #237 is imprinted on the toy's package.
4. Unit Retail Value: Approximately \$10.00.
5. Useful Product Lifetime: Unknown.
6. Geographic Limits of Distribution: Nationwide.
7. Number of Defective Products Distributed in Commerce:

- Total Produced	523,118
- With manufacturer	14,148
- With distributors	
- With retailers {	508,970
- With consumers	

RESTRICTED

The company believes substantially all of the units shipped are in the possession of consumers.

8. Date Defective Products Produced and How Determined: The Fun Fountain toy was produced in 1977, 1978 and 1979. All units produced after November 30, 1979 will contain the redesign valve.

9. Proportion of Defective Products in Total Number Produced: The staff believes that all the subject toys contain the defect due to design.

Safety Related Complaints

The Commission investigated an incident where a 6-year-old child sustained hyphema in his left eye. Hyphema is described as capillary bleeding in the anterior chamber of the eye. He was apparently leaning over the clown head when the water faucet was turned on and consequently the stream of water struck the victim in the eye or eyes. Wham-O received an additional report of a child sustaining hyphema to his eye. Wham-O reports the hose may have been kinked and then let out while the child's face was over the toy. The stream of water hit the child in the eye.

Wham-O reported two other safety-related complaints which occurred as the result of the child allegedly sitting on the clown head (with the hat removed) over the stream of water. These children reportedly suffered minor or no injury.

Corrective Action

1. Pattern of Distribution

Wham-O markets the subject product through salesmen and toy representatives to wholesalers and retailers. Wholesalers in turn sell to retailer accounts. Retailers sell directly to consumers.

13

2. Notification

- To Toy Representatives and Salesmen

- December 14, 1979: Letter sent providing preliminary information about the corrective action plan forthcoming. (Attachment A)
- February 20, 1980: Letter mailed providing detailed information about the corrective action program. (Attachment B)

- To Direct Accounts

- February 20, 1980: Letter mailed providing detailed information about the corrective action plan. The letter included a point of purchase poster, response sheet for number of units in inventory, and a self-addressed envelope for their reply. The mailing envelope was marked "Important Safety Information Enclosed." Any customer who is a distributor is being asked to furnish copies of the corrective action plan information to its retail accounts. (Attachment B)
- February 20, 1980 to March 7, 1980: Mailing of an initial supply of retrofit kits to customers.

- To Consumers

- February 20, 1980: Posters at retail locations measuring approximately 22 inches by 28 inches.
- March 10, 1980: Joint CPSC/Wham-O press announcement. (Attachment C)

3. Election as to Repair, Replacement or Refund

(a) Retrofit modification - Wham-O is retrofitting units in its own inventory and is providing free kits to retrofit customer inventories and units in consumer hands.

The retrofit kit consists of a water flow control valve which decreases, limits and keeps constant the flow of water from the product to approximately 3 1/2 gallons per minute under varying water pressure. Instructions are included in the kit showing how to snap the flow control valve into the hose connector of the product. Once it is snapped in place, the flow control valve cannot be removed.

In addition to the valve kit, customers will also be sent "Important" notices and "Safety Check Lists" to be affixed to the individual product package cartons. (Attachment D)

14

[Handwritten signature]

Consumers may obtain the free retrofit kit from the place of purchase, by writing Wham-O or by calling the company on its toll-free telephone number (in California by calling collect).

(b) Future engineering changes to eliminate the defect - A similar water flow control valve which limits the flow of water out of the nozzle to 3 1/2 gallons per minute will be incorporated on all future production. All new production manufactured after November 30, 1979 will contain such a valve. All Wham-O inventory will be modified to insert such a valve prior to shipment. In addition the future production product cartons will have the "Important" notice on the front panel and a "Safety Check List" on the back panel.

(c) Engineering evaluation - The Commission's medical director has examined the original design and new design of the toy and believes the product with the flow control valve is safer and the risk of injury is reduced.

Based on the Commission's engineering evaluations, the test data submitted by the company and the present subjectivity in measuring eye damage relating to various levels of water velocities, the staff finds Wham-O's proposed field and future production fix to be satisfactory in reducing the risk of injury associated with the subject toys.

Conclusion

CEPD finds Wham-O's proposed corrective action plan to be adequate. The Los Angeles Area Office will monitor the progress of the firm's plan.

23

15

WHAM-O-GRAM

Attachment A

December 14, 1979

BULLETIN #143

TO: ALL TOY REPS
FROM: Dick Moe
SUBJECT: FUN FOUNTAIN, STOCK NO. 237

The attached letter regarding the above product is self-explanatory.

So that we can eliminate many questions from your accounts and the possible loss of orders, we would like you to do the following now:

1. Send a copy of the enclosed letter immediately to each of your major accounts or any that you deem necessary that have purchased or will purchase Fun Fountain. Please call if you need additional copies.
2. After mailing the letter, follow-up by phone or in person with each buyer to assure him that the basic corrective measure (the addition of a water flow control valve) has been approved by the staff of the Consumer Product Safety Commission as "satisfactory."
3. Send me a list of accounts in your area and dates that the letter was sent to them.

A complete Corrective Action Program will be forthcoming as soon as we have approval from the CPSC staff. This will basically pertain to units sold in 1977, 1978, and/or 1979. We repeat that this is not a Recall. No returns are necessary nor will they be accepted. Please assure your accounts that all new production will have the water flow control valve and that they will be getting full details shortly as to how to convert any Fun Fountains in inventory.

If you have any questions, please give me a call. Please send the enclosed letter to your major accounts immediately. This should have no effect on your listings or projected sales.

Attachments

Dick

16

X



December 14, 1979

Re: Fun Fountain, Stock No. 237

Dear

The staff of the Consumer Product Safety Commission has recently made a preliminary determination that the Wham-O Fun Fountain toy presents a substantial product hazard as defined in Section 15 of the Consumer Product Safety Act. This preliminary determination was made on the basis of two apparently minor and non-permanent eye injuries allegedly suffered by children late in 1979, as a result of being struck in the eye by the stream of water from the product. These alleged injuries apparently occurred in localities having high water pressure.

Wham-O does not agree with the preliminary determination of the staff of the CPSC. Nevertheless, Wham-O has modified the product by the addition of a water flow control valve, which substantially decreases, limits and keeps constant the amount of water from the product under varying water pressures. This valve eliminates any potential risk of injury of this source without detracting from the play value of the product. All product manufactured and sold after November 1979 will contain such a water flow control valve.

FUN FOUNTAINS CONTAINING SUCH A WATER FLOW CONTROL VALVE HAVE BEEN TESTED BY THE STAFF OF THE CPSC AND DETERMINED BY THEM TO BE SATISFACTORY.

Wham-O is about to institute a Voluntary Corrective Action Program with regard to this product and expects to submit such program to the CPSC for its approval shortly. Such a Voluntary Corrective Action Program will consist of the addition of a water flow control valve in all new production, a method of notice of the program and a method of distributing similar water flow control valves for insertion in products previously sold by Wham-O. We believe this program will be accepted as satisfactory by

17



-2-

the CPSC and will forward you full details of it as soon as approved.

We wish to assure you that all new production of Wham-O Fun Fountains, stock no. 237, will fully comply with the requirements of the CPSC, so that you may make your 1980 sales plans for this product accordingly.

Very truly yours

WHAM-O MFG. CO.

By *Dick Moe*
Dick Moe
General Sales Manager

DM/sch

18

Attachment B

Front Portion of Mailing Envelope to Customers



835 EAST EL MONTE STREET
SAN GABRIEL, CALIF. 91778

**IMPORTANT SAFETY
INFORMATION ENCLOSED**

17

19



February 20, 1980

TOY BUYER OR MANAGER

RE: NOTICE OF VOLUNTARY CORRECTIVE ACTION PROGRAM,
WHAM-O FUN FOUNTAIN TOY, STOCK NO. 237

Dear Customer:

Wham-O is voluntarily initiating this CORRECTIVE ACTION PROGRAM with regard to its Fun Fountain Toy, Stock No. 237. This Program has been determined to be adequate by the staff of the Hazard Correction Branch of The U.S. Consumer Product Safety Commission. This Notice is to inform you of the problem, the solution to the problem, and the action requested of you.

THIS IS A VOLUNTARY CORRECTIVE ACTION PROGRAM AND NOT A RECALL. NO PRODUCT RETURNS ARE NECESSARY NOR WILL THEY BE ACCEPTED.

1. THE PROBLEM:

On November 14, 1979, the staff of the Consumer Product Safety Commission made a preliminary determination that the Wham-O Fun Fountain toy presents a substantial product hazard as defined in Section 15 of the Consumer Product Safety Act. This preliminary determination was made on the basis of two apparently minor and non-permanent eye injuries allegedly suffered by children late in 1979, as a result of being struck in the eye by the stream of water from the product. These alleged injuries apparently occurred in localities having high water pressure.

2. THE SOLUTION:

Wham-O does not agree with the preliminary determination of the staff of the CPSC. Nevertheless, Wham-O has modified the product by the addition of a water flow control valve, which substantially decreases, limits

20



Toy Buyer or Manager
February 20, 1980
Page Two

and keeps constant the amount of water from the product under varying water pressures. In Wham-O's opinion the addition of this valve eliminates any potential risk of injury of this source without detracting from the play value of the product.

FUN FOUNTAINS CONTAINING SUCH A WATER FLOW CONTROL VALVE HAVE BEEN TESTED BY THE STAFF OF THE CPSC AND ON DECEMBER 10, 1979 WERE DETERMINED BY THEM TO BE "SATISFACTORY IN REDUCING THE RISK OF INJURY ASSOCIATED WITH THIS TOY."

a. Future Shipments of Redesigned Fun Fountains by Wham-O:

All Fun Fountains shipped by Wham-O after December 1, 1979, will contain the new water flow control valve.

All such redesigned product will be readily identifiable by:

- (1) The hose connector which is BLUE, and the individual carton in which the product is packaged has an "IMPORTANT" notice on the front panel and a "SAFETY CHECK LIST" on the back panel.
- (2) A limited quantity of Fun Fountains currently in Wham-O's inventory have a RED hose connector and have been modified by the insertion of a clearly visible BLUE Water Flow Control Valve insert. Such product is packaged in an individual carton which has the "IMPORTANT" notice and "SAFETY CHECK LIST" on the carton.

b. Modification of Fun Fountains Previously Shipped by Wham-O:

Fun Fountains previously manufactured and shipped in 1977, 1978 and 1979 did not contain a water flow control valve.

21



Toy Buyer or Manager
February 20, 1980
Page Three

These products may be identified by a RED Hose Connector. Also the individual carton in which they are packaged does not contain a prominent "IMPORTANT" notice on the front panel and does NOT contain a "SAFETY CHECK LIST" on the back panel.

Wham-O has designed a Blue Snap-in Water Flow Control Valve Insert which can easily be inserted in the Hose Connector of such products and once inserted cannot be removed. Such inserts will be made available by Wham-O without charge to all wholesalers, retailers and consumers who purchased such products and should be inserted in the Hose Connector of all Fun Fountains having a RED HOSE CONNECTOR, which have not already been modified by the addition of such insert.

3. YOUR PART IN THE CORRECTIVE ACTION PROGRAM:

Our records indicate that you purchased Fun Fountain toys, stock no. 237 in 1977, 1978 and/or 1979. We urgently request your assistance and cooperation in implementing this Corrective Action Program as follows:

- a. Please check your inventory and advise us of the number of Fun Fountain toys you have in stock. We will send you a supply of BLUE water flow control valve inserts which we request you snap in the hose connector of such toys and a supply of "IMPORTANT" notices and "SAFETY CHECK LISTS" to be affixed to the individual cartons in which the product is packaged.
- b. If you are a Jobber, Redistributor, or a Retail Chain, please notify your customers and/or Retail Outlets of this "Corrective Action Program" and furnish them with copies of this notice and enclosed material. Additional copies of this notice, the Consumer Notice to be posted in the Retail Store and BLUE Water Flow Control Valve Inserts, may be ordered by contacting our Sales

22



Toy Buyer or Manager
February 20, 1980
Page Four

Representative of our Customer Service Department
by mail or by calling on our WATS line
(800) 423-4174 or (213) 287-9681.

- c. If you are a Retailer, please post the enclosed "Consumer Notice of Corrective Action" in a conspicuous place in your toy department or near your cash register and furnish the consumer, upon request, a BLUE Water Flow Control Valve Insert. An initial supply of such inserts is being sent to you under separate cover. Additional inserts may be ordered by contacting our Sales Representative or our Customer Service Department by mail or by calling on our WATS line (800) 423-4174 or (213) 287-9681.

Your assistance and cooperation in implementing this program is greatly appreciated.

If you have any questions, please call me.

Sincerely

WHAM-O MFG. CO.

By Dick Moe
Dick Moe
General Sales Manager

DM/sch

23 27



PLEASE FILL OUT AND RETURN AS SOON AS POSSIBLE.

POSTAGE PAID ENVELOPE ATTACHED.

To: Wham-O Mfg. Co.

Attn: Customer Service

We have in inventory _____ individual cartons
of the Fun Fountain® toy purchased prior to January 1, 1980.
Please forward the above number of retrofit units containing
the waterflow control valve to:

Dept. or Individual

Company

Street Address

State

#432

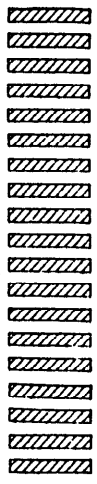
24 *[Handwritten signature]*

Attention: Customer Service

WHAM-O MFG. CO.
835 EAST EL MONTE ST.
SAN GABRIEL, CALIF. 91778

POSTAGE WILL BE PAID BY

BUSINESS REPLY MAIL
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES



25

FIRST CLASS
Permit No. 323
San Gabriel, Calif.

Actual Poster
32" x 28"

CONSUMER NOTICE
OF VOLUNTARY
CORRECTIVE ACTION PROGRAM
WHAM-O FUN FOUNTAIN #237
JANUARY , 1980

A potential hazard may exist with regard to the Fun Fountain toys pictured below (Fig. 1 & 2), which were manufactured prior to January 1980. In areas of extremely high water pressure, the stream of water emitted from the product may be uncomfortable to the touch and may cause injury to sensitive parts of the human body.

All Fun Fountain toys manufactured after December 1979, contain a water flow control valve, which eliminates this potential problem. Such product is readily identifiable by its BLUE hose connector (Fig. 3), or if in its individual carton, by the "IMPORTANT" notice and "SAFETY CHECK LIST" on the carton.

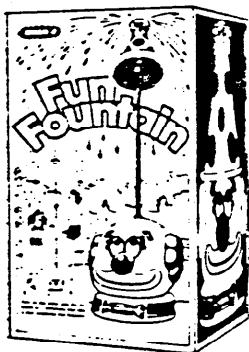


Figure 1

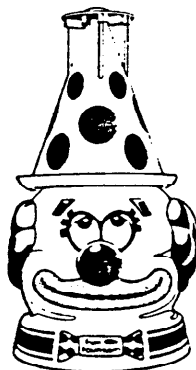


Figure 2

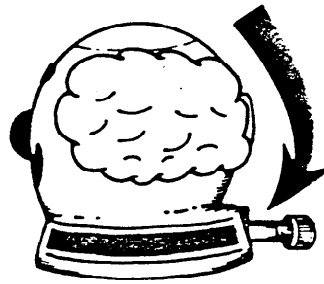


Figure 3

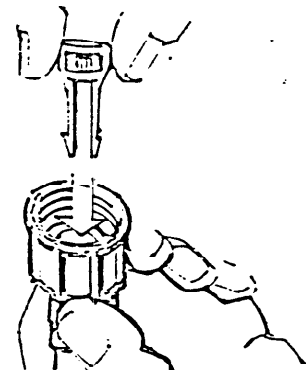


Figure 4

Persons who have previously purchased this product should check the hose connector.

1. If the hose connector is BLUE, it already contains a water flow control valve.
2. If the hose connector is RED, but contains a BLUE insert clearly visible, it already contains a water flow control valve.
3. If the hose connector is RED and does not contain a clearly visible BLUE insert, please ask the store manager for a free water flow control valve insert (Fig. 4) or contact:

Customer Service, Dept. 7
Wham-O Mfg. Co.
835 East El Monte Street
San Gabriel, California 91778

(800) 423-4174 or (213) 287-9681 and an insert will be mailed to you free of charge.

The insert will eliminate the potential problem. Push the insert into the hose connector. It snaps in place easily and permanently.

This is not a recall. No returns will be accepted.

24
26

Attac' sent C

NEWS from CPSC

U.S. Consumer Product Safety Commission

FOR RELEASE:

MONDAY, MARCH 10, 1980

WHAM-O TO CORRECT POTENTIAL HAZARD
IN CHILDREN'S OUTDOOR WATER TOY

WASHINGTON, D.C. (March 10)-- A program to correct more than 100,000 outdoor "Fun Fountain" water toys which may cause serious injuries to children is being conducted by the Wham-O Mfg. Co. of San Gabriel, California.

The firm, in cooperation with the U.S. Consumer Product Safety Commission, voluntarily will supply free corrective water flow control valve inserts for its "Fun Fountain" toys produced from 1977 through November, 1979.

The toy consists of a clown hat and head which attaches onto the end of a garden hose so that the hat rises in the air when water flows through the clown's head. Children may be inclined to peer into the water outlet and the stream of water could cause serious eye injuries, especially in communities with high water pressure.

CPSC so far has been informed of two consumer complaints since June, 1979, involving a six-year-old boy and a seven-year-old boy who suffered eye injuries when struck at close distance by water emitted from the "Fun Fountain" toys.

-more-

27

The Wham-O "Fun Fountain" water toys were sold nationwide in toy stores and variety stores for approximately \$10.00 each. The model number of the toy, #237, is imprinted on the toy's package.

According to the company, the potential hazard has been corrected on all "Fun Fountain" toys manufactured since December, 1979 when the toys began to be produced with a water flow control valve to decrease and control the water flow. Such new editions are readily identifiable since they are equipped with a blue hose connector (the older design has a red connector) at the base of the clown head. The words "Important Notice" and "Safety Check List" also are imprinted on the new toy cartons.

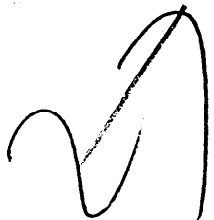
If the hose connector is red but contains a blue insert which is clearly visible, then it also has been corrected and is equipped with a water flow control valve.

To correct the potential hazard in "Fun Fountain" toys manufactured before December, 1979, parents are urged to go to the place of purchase to receive a free water flow control valve insert, or they may contact Wham-O directly to receive a free valve insert (Customer Service Dept. 7, 835 East El Monte Street, San Gabriel, California, 91778). Consumers also may telephone Wham-O toll-free at 800/423-4174 (in California, call collect at 213/287-9681).

The water flow control valve snaps easily into the hose connector and once installed will remain firmly within the connector, according to the company.

Consumers wishing further information may call CPSC's
toll-free Hotline at 800/638-8326; in Maryland, call 800/492-8363;
and in Alaska, Hawaii, Puerto Rico and the Virgin Islands,
800/638-8333.

29



FUN FOUNTAIN® PACKAGE

Attachment D

FRONT OF PACKAGE:

IMPORTANT

Recommended for children 5 years and over. Adult supervision recommended. Before using FUN FOUNTAIN see back of box for INSTRUCTIONS and SAFETY CHECK LIST.

BACK OF PACKAGE:

Recommended for children 5 years and over.
Adult supervision recommended.

SAFETY CHECK LIST

1. ☐ Be sure to set up FUN FOUNTAIN only on a soft lawn surface. Do not use FUN FOUNTAIN on hard surfaces such as concrete or asphalt. Such surfaces become slippery when wet and can cause falls resulting in serious injuries.
2. ☐ Before using and periodically during use, be sure to check under and around FUN FOUNTAIN for sharp objects, rocks, sticks, dog bones, lawn sprinklers or any object which can cause an injury.
3. ☐ Be sure to have adult supervision.
4. ☐ To be used by children, 5 years and over.
5. ☐ Do not allow children to sit on the clown head or look into the nozzle on top of the head whether or not the water is turned on. A surge of water can cause physical discomfort or injury.
6. ☐ Do not permit children to pick up the FUN FOUNTAIN and direct the stream of water at other children.
7. ☐ Be sure that children are wearing bathing suits or other suitable garments.
8. ☐ Be sure to detach and store your FUN FOUNTAIN when not in use.
9. ☐ Be sure to turn water on slowly and only enough to raise the hat to a height of 8 to 10 feet.

Memorandum

TO : FILE
Through: Catherine C. Cook, Director, CEPD *CC*
Through: Frank B. Pipkin, Chief, HCB/CEPD *FBP*
FROM : Through: Anthony Rossi, Technical Advisor *AR*
Sandra C. Shimasaki, Project Officer, CEPD *SC*
DATE: December 10, 1979
SUBJECT: Wham-O Manufacturing Company Fun Fountain

Wham-O Manufacturing Company submitted test data on November 30, 1979 to CEPD with regard to its Fun Fountain toy in response to CEPD's verbal request on November 27, 1979. The Wham-O data indicates that the proposed modified Fun Fountain significantly reduces the force at which the water comes out of the nozzle as compared to its original design. Wham-O states that use of the 3.5 gallons per minute (GPM) flow control device is the lowest flow rate which they believe can be used and still keep the toy operating properly.

Recognizing that the level of water velocity which would do measurable damage to the eye is at present a subjective measurement, according to our medical director, HCB believes Wham-O's proposed retrofit flow control device (3.5 GPM washer) for future production and use as a field fix is satisfactory in reducing the risk of injury.

31

29

Memorandum

TO : Catherine Cook, Director, CEPD
Attn: Tony Rossi
Thru: Jules Bigio, Director, ESEP *JB*
FROM : Neil P. Zylich, ESEP *NPZ*

DATE: NOV 21 1979

SUBJECT: Evaluation of Fun Fountain HEB 79-2362 ID 80-16
Sample Numbers E-100-401, E-100-403, and E-100-406

Product

Fun Fountain, stock number 237, manufactured by Wham-O Manufacturing Company, San Gabriel, California 91778.

Description

The subject fun fountain is shown in Photos #1 through #4. It consists of a plastic head about 9 inches in diameter and 10 inches tall and a plastic hat 8 inches in diameter and 9 inches tall. The head is connected to a water faucet through a hose and water comes out the top of the head. The water comes out with a velocity high enough to lift the hat high in the air (about 15 feet) on a windless day.

A diffusing sprinkler attachment is also supplied to make the fun fountain into a sprinkler on windy days (see Photos #9 through #11).

Sample number E-100-401 is the original old version without any water flow restriction in the head. Sample number E-100-403 is the new version with a water flow restrictor in the head. Sample number E-100-406 is an old version with a retrofit water flow restrictor (see Photos #5 through #8).

Test Procedure

The diameter of the fun fountain water exit orifice on the top of the head was measured. The flow rate of the water through the head was determined for the old version, the new version, and the retrofit restrictor. The flow rate was measured by allowing the fun fountain to fill up a large bucket and determining the time required to do so with a stop watch. The water in the bucket was then carefully measured. The flow rates and exit velocities of the fun fountains were then calculated (see sample calculations). The water pressure at the input to the 25 ft hose and at the input to the head of the fun fountain were monitored during each test and recorded. A 25 foot, 5/8 inch hose was used between the faucet and the fun fountain.

32 *25*

Sample Calculations

Test #1

To find flow rate:

Time to fill bucket = 26.1 seconds
 Amount of water in bucket = 2.1 gallons

$$\text{Flow rate} = \frac{2.1 \text{ gal} \times 60 \text{ sec/min}}{26.1 \text{ sec}}$$

$$= 4.8 \text{ gal/min}$$

$$\begin{aligned} \text{Flow rate (ft}^3\text{/min)} &= \frac{4.8 \text{ gal/min}}{7.48 \text{ gal/ft}^3} \\ &= .6417 \text{ ft}^3\text{/min} \end{aligned}$$

To find velocity of water leaving fun fountain:

$$\text{Velocity} = \frac{\text{flow rate}}{\text{area}}$$

$$= \frac{.6417 \text{ ft}^3\text{/min}}{1/4 \pi (.182)^2 \text{ in}^2 \times 1/144 \text{ ft}^2\text{/in}^2}$$

$$= 3545.4 \text{ ft/min}$$

$$= 59.1 \text{ ft/sec}$$

To find the velocity 3 feet above nozzle:

$$\text{Velocity} = \sqrt{(\text{original velocity})^2 - 2 g \times \text{height}}$$

$$= \sqrt{(59.1 \text{ ft/sec})^2 - 2 \times 32 \text{ ft/sec}^2 \times 3 \text{ ft}}$$

$$= 57.5 \text{ ft/sec}$$

33

25